



December 10, 2004

Mr. Nabil S. Fayoumi  
U. S. EPA - Region 5  
77 West Jackson Boulevard (SR-6J)  
Chicago, Illinois 60604-3590

**Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order (UAO) Groundwater Operable Unit  
Monthly Report; November 1 - November 30, 2004 Reporting Period**

Dear Nabil:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports. This report is for the period November 1 – November 30, 2004.

Sincerely,

Steven D. Smith  
Project Coordinator

cc: Ken Bardo, - U. S. EPA  
Mayor Sauget - Sauget, IL  
Sandra Bron – IEPA  
Mike Coffey - USFWS  
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)  
Mayor Frank Bergman – Cahokia  
L. Glen Kurowski - Monsanto  
Cathleen Bumb – Solutia  
Linda Tape - Husch & Eppenberger  
Richard Williams – Solutia

## **Sauget Area 2 Site - Sauget, Illinois**

### **October 3, 2002 UAO – Groundwater Operable Unit**

#### **Status Report**

**Date of Report:** December 10, 2004

**Period Covered:** November 1 - November 30, 2004

#### **Agency Actions / Communications**

*In an e-mail message dated June 19, 2003, U. S. EPA requested the submission of revised versions of the Focused Feasibility Study, the Remedial Design Work Plan, and the Pre-Final (95%) Remedial Design. The revisions were required to allow the use of a slurry wall rather than jet grouting for construction of the barrier wall. The revised documents were submitted on July 3, 2003. The ESD was issued by US EPA on July 30, 2003. The Final Design Submittals were approved by EPA on October 16, 2003.*

#### **Work Performed During the Reporting Period**

##### **Slurry Wall**

- Backfilling of the slurry trench was completed on November 8<sup>th</sup>, on schedule.
- Stabilization of the excess slurry by the addition of cement (nominally 8 percent by weight) continued during the reporting period and will continue into December.
- Site cleanup and final grading continued in the southern third of the site. Excavation of the upper three feet of backfill along the wall continued, in order to permit construction of the slurry wall cap. The cap has been completed between Station 5+00 (the end of the south leg of the wall) and approximately Station 16+00. Cleanup activities began on the north side of the site along Riverview Avenue, but were hampered by heavy rains in the latter part of the month.
- Demobilization of equipment and labor that are no longer needed on the project continued during the month.
- All QA/QC test results received during the reporting period satisfied the project specifications and guidelines.

## **Groundwater Treatment**

- For the entire month, the system was operated in such a way as to maintain the water levels inside the wall equal to, or lower, than the river level.
- Concerns have arisen about the reliability of the river level elevations provided by the bubbler gauge. Discussions are being held with the Corps of Engineers to permit use of the gauge mounted on the Eads Bridge immediately upstream of the site.
- A report summarizing the piezometer maintenance and replacement activities completed during the month of October was submitted to the Agencies on November 9, 2004. That report also contained recommendations for future operation of the groundwater extraction system. The contents of the report were summarized at a meeting held at the site on November 16<sup>th</sup>. The following maintenance activities still remain to be completed:
  - Redevelopment of all piezometers.
  - Replacement of all piezometer sensors with more robust and sensitive sensors. The new sensors will be between 5 and 10 times more sensitive than the existing installations. The equipment has been received and installation will begin as soon as the piezometers have been redeveloped in January.
  - Installation of a telemetry system that will permit a river level signal feed from the Corps of Engineer's gauge on the Eads Bridge.
  - Next month's report will include a concise table of piezometer and surface water readings instead of the numerous graphs attached to this and preceding reports.
  - Agreement was reached with EPA and Illinois EPA to collect data over the next 90 day period to use in better defining how the pumping system will be operated.
- Effluent pumping data for each well are attached.
- Piezometer and pumping data are being forwarded to the Agencies weekly.

## **Schedule**

A new construction schedule was submitted in April showing backfill completion by the middle of November. This schedule was satisfied.

### **Submittals in November**

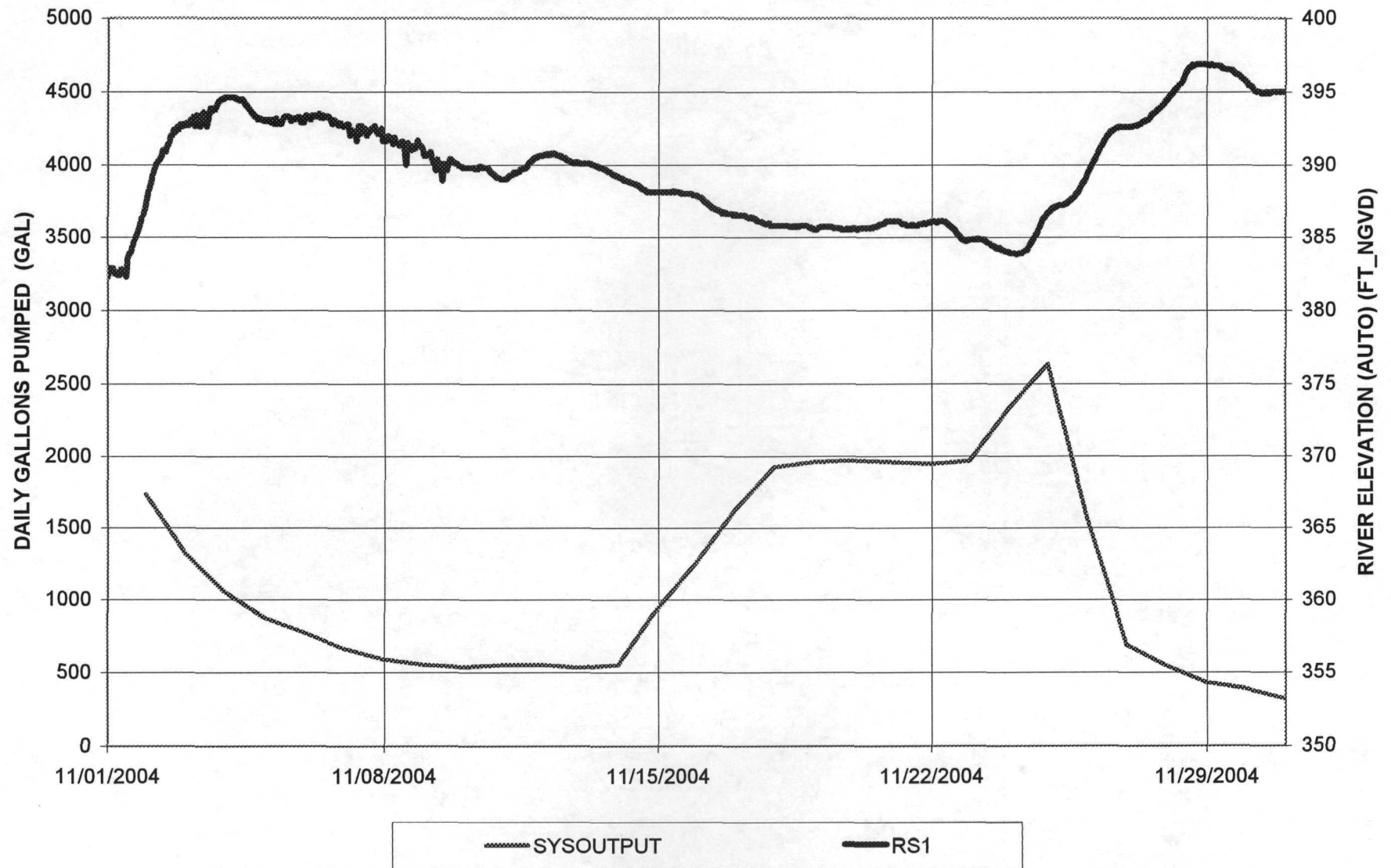
A report summarizing maintenance activities on the piezometers was submitted to the Agencies on November 9, 2004.

### **Work Scheduled for Next Reporting Period**

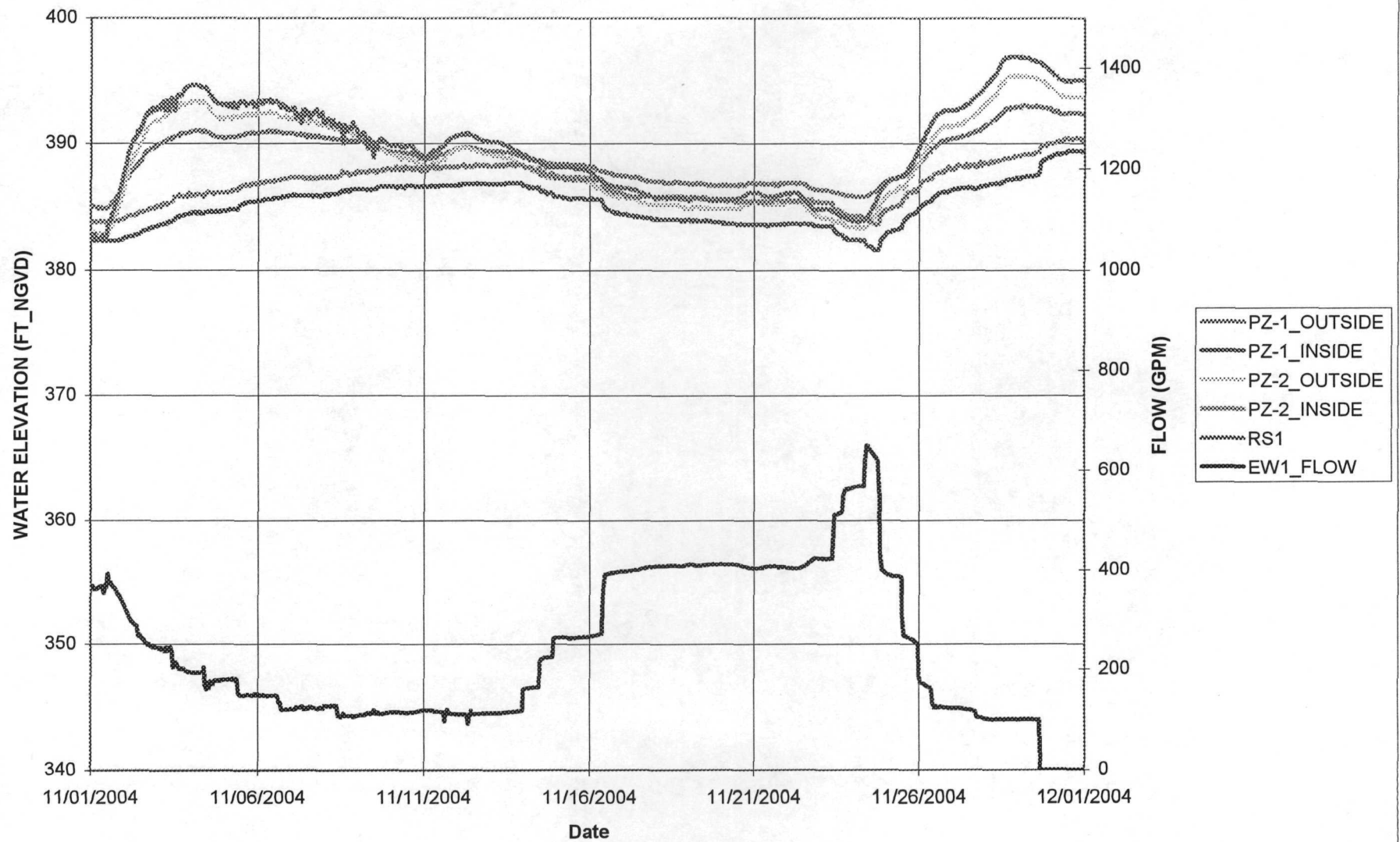
- Continue pumping and treating groundwater based on piezometer pairs
- Continue final site cleanup.
- Continue constructing the cap on the slurry wall.
- Continue solidifying excess slurry in the containment cell on top of Site R.

## **PUMPING**

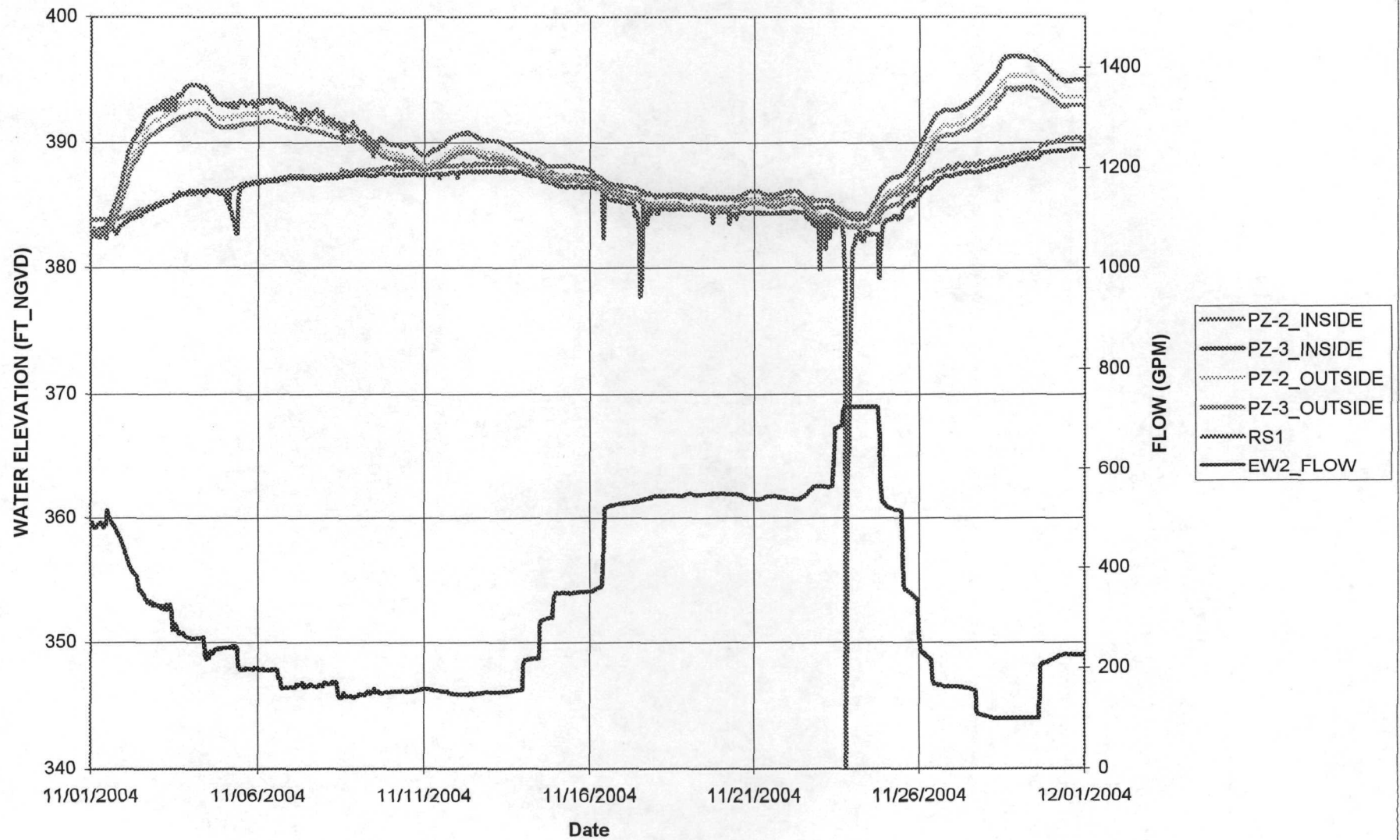
DAILY TOTAL GALLONS PUMPED W/ RIVER STAGE VS TIME



WATER ELEVATION AND FLOW PLOT



WATER ELEVATION AND FLOW PLOT





WATER ELEVATION AND FLOW PLOT

